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THE
# ATLANTIC MONTHLY

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AUGUST 1937

## THE ANIMAL KINGDOM

BY IVAN SANDERSON

[IVAN SANDERSON is now in his twenty-seventh year. In 1928 he was a member of an expedition to the Dutch Indies, collecting specimens for the British Museum. In 1932 he set forth on a second invasion of the Animal Kingdom, this time as leader of the Percy Sladen Expedition to British Cameroons, West Africa. There, for the better part of two years, he collected the zoölogical specimens and encountered the beasts which he has described in the following pages. — THE EDITORS]

I

THE animals that crowd their little faces into these pages lived, or are still living, in the deep virgin forests of West Africa, around a place called Mamfe, some 250 miles north-north-east of Calabar at the extreme south-east corner of the Protectorate of Nigeria.

Running north from Calabar is a river known as the Cross River — a logical name for a river that one has to cross continually because of sand bars. This river suddenly turns right, out of Nigeria, into the adjacent country mandated to Great Britain. All the country to the west or left of this river is intersected by roads and railways; to the east is untouched, unspoiled Africa, as it was before Europeans began crawling about it.

It was into such country that I went with two colleagues, George Russell and Philip Seaton, and a varying complement of Africans collected en route as necessity dictated — but perhaps before I go further I had better explain why I went to Mamfe at all.

Ever since I was a child, and had a nurse who showed me animals, chased butterflies in the sunlight with me, and taught me to blare out the names of strange animals from a book full of pictures of palm trees, I had wanted to go and look for animals in a land where there was sunshine. Then one day I found myself in the position of being able to choose between staying a year at school before going to a university, to learn more about my beloved animals, or doing something else. I chose the something else, and bolted from Europe like a shot rabbit at the

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tender, impressionable, and exciting age of seventeen, my boxes filled with traps, butterfly nets, skinning implements, and all the other recognized stock-in-trade of the collector.

Then came the first shock to my youthful enthusiasm. I worked by night and by day setting traps, stalking animals, skinning animals, stuffing animals; and when all the animals so painstakingly accumulated had been looked at in the cold light of a museum, what did my work amount to? Just nothing more than a repetition of some of the looser moments of that great naturalist Alfred Russel Wallace! There was obviously something wrong.

Slowly it dawned on me. Scientific methods of collecting animals were out of date.

The truth seemed to be this. Nobody knew anything about the *how* and *why* of animals' behavior other than studying those few kept in institutions. Only the bold differences that can be observed through a comparison of dried and pickled remains in museums seemed to have been recorded. I decided that I would study animals by laboratory methods but in their natural surroundings and in the jungle — if somebody might be persuaded that my idea was practical, necessary, and comparatively inexpensive.

The start of organizing an expedition is somewhat bewildering. I soon saw that business methods would have to be employed if my ideal was to be realized — a real portable research station to be taken into the heart of the African jungle. The question of capital had to be tackled first.

By chance a circular fell into my hands stating that a certain famous scientist required internal organs of some particular animals. Funnily enough, these animals were only to be found in the one place that I had had in the back of my mind as a promising spot for operations.

Then, again by chance, I heard of another man who wanted definite evidence of a whale in the rivers of the same country. From him I went to the leading scientists at Cambridge — and found that they required the exotic Giant Water Shrew from the same place, and also a general collection of the animals inhabiting the country. The British Museum also wanted specimens of the queer, tick-like Podogona. All these people, moreover, offered to assist me in getting backing from scientific societies.

My major problems of what to collect and where to get the necessary money solved, the next question arose — whom to take with me? For the tropics and hard work I believe one must weed out all the athletes, sportsmen, and anybody who is large, beefy, or 'tough.' From the remaining 'worms' you should choose someone who is at least at home in and used to smoky bars, airless cabarets, and crowded tube trains — and hope that he will not carry with him any illness which will flower in the tropics.

My friend George Russell fulfilled all the conditions, and, strangely enough, on the quiet happened to be a better athlete than many of the beefy gentlemen — and a better sportsman I could not have selected.

When George got persistent low fever and was told he was dying of consumption I rushed him down to the coast, meanwhile wiring frantically for someone to take his place. George, having found that his lungs were as sound as any man's, waited at the coast for this substitute and brought him up to me. Philip Seaton, whom we named the Duke for abstruse reasons of our own, was an ideal person for an expedition. He was slightly 'beefy' at first, but after one or two spates of fever he got thin like us, and was positively bouncing by the end of the trip.



II

From our little house at Mamfe the view was conventional enough, provided one looked west, southwest, or south: fields of grass, a little stream, a tennis court, some small sheds with corrugated-iron roofs, and a second-class metal road winding between them all. Even the trees seemed familiar. A horse grazed quietly, it drizzled from a gray sky, and a white man wearing gray flannel trousers and smoking a pipe passed along the road on a bicycle.

All of a sudden incongruity in the form of a dazzlingly white bird, with awkward black legs and a long beak, fell rather than flew into sight and attempted to land on the horse. Needless to say, it missed its objective, as egrets always do. Hurtling against a fence, it closed its wings before finding its feet and remained wobbling drunkenly back and forth, giving vent to shrill cries and staring wildly about, as if this were not its own fault.

These birds are vermin, — or rather, Africa is verminous with them, — for nothing so beautiful or artistically satisfying as an egret could ever really be classed with rats and the body louse. Previously they were much sought after for their plumes, which stick out from under the wings like a tiny snow cloud. Now that better and cheaper plumes can be made out of cellophane, this lovely bird is spared to play the part of the London pigeon around the houses of West African settlements.

On this particular morning, when the whole world as viewed from the Mamfe rest house seemed gray and dark green, the egrets stood out like lights in their dazzling whiteness. On one side of the house a long string was stretched between two poles. Along this at intervals little butter-muslin bags were tied, containing the skulls of animals that had been skinned. The skull is almost the most precious part of an animal from a zoölogist's point of view, and receives special attention. It is cleaned of as much flesh as possible, soaked in running water, rolled in sawdust, and finally hung out to dry in a little bag to which a label is attached. The bag is to prevent the loss of teeth that may become loosened through drying or decomposition of the flesh.

The flies, however, soon found out what was in the little bags and proceeded to lay their eggs in them. The egrets found the flies, and the string became a sort of second Chambre des Députés. The Dichards flapped their wings and wobbled precariously, the Front Populaire buzzed incessantly, multiplying among the offal almost while one watched. Egrets are presumably waders, if judged by their legs and feet, which are long and slender. The process of chasing fly grubs suspended about three inches below a swaying string becomes for them, therefore, about as great a problem as eating an apple tied below a rope would be to a rather inexpert tightrope walker. Each bird fell off once every few minutes; sometimes all would topple over together in a cloud of flies.

The string of little bags was removed at sundown and taken indoors as a precaution against the undue attentions of the many nocturnal marauders. One egret, a rather weedy-looking bird, discovered where they went to, a small shed at the back of the house. Unhappily, he got wedged between the wall and the eaves of the roof in trying to gain an entrance, though how he got so far I could never make out. Here he remained, squawking like a child, while we searched for the focus of the commotion. I found him not particularly frightened but obviously rather angry, like Walt Disney's duck, his eyes filled with that expression of surprised wonderment that an egret always assumes when committing its daily folly or error in judgment. As I grappled with his

feathery posterior in an endeavor to squeeze it through the eaves, he gave a hiccough, opened his beak, and let fall three balls of fly maggots each as large as an apple. The egret looked more surprised than ever and slipped through the eaves without further difficulty.

The egrets of Mamfe had enemies, one of whom met his end suddenly on this particular gloomy day. The seedy-looking egret, after his miscalculation at the back of the house, had assumed an impertinent attitude toward his kith and kin. Scorning the swaying skull string, he took to intruding upon our privacy at the skinning tables and had to be constantly ordered off the field for roughhousing with the skinners. On this occasion he was shooed off the verandah at the moment when his brethren were beating a hasty retreat to the safety of the bushes behind the kitchen.

Swaying and chattering with anger, he stood amongst the stuffed animals pinned on boards that had been carried out to dry in the sun, which had just made its first appearance in several weeks. So taken up was he with his indignation that he failed to notice the hurried departure of the other birds or the silent cruciform shadow that glided mysteriously over the hard-beaten earth around him. Gong-Gong, the youngest member of the staff, who was posted at the corner of the verandah throughout the day to watch for the hawks and kites which swooped out of the sky to snatch up our stuffed rats, thinking them to be alive, gave the warning.

The hawk, a particularly big one, which would probably be called an eagle in this country, was, however, after our little friend the egret. Gong-Gong's call to arms was the signal for a wild scramble for loaded shotguns, always kept to hand. We dashed for the open only to see the shadow of the marauder flash across the ground as the great bird nose-dived for his prey. The little egret, suddenly realizing his peril, struggled to gain the air.

With a deafening report two barrels gave tongue at the very instant the hawk was stalling to bring his talons into position for the death grip. With a burst of feathers, the interloper swerved, somersaulted, and crashed with wings outspread. The excited staff dashed eagerly in to the kill, but the fierce bird was by no means done for. Hissing, yellow eyes blazing, he hurled himself at the men's legs. He was quickly dispatched with a shot from an automatic.

In the excitement of victory the egret was forgotten. He had escaped and apparently benefited from his experience, for he never returned again, though we saw him later on the sandbanks in the river with his drooping left wing and incredulous expression.

### III

'Master, man bring beef.'

There was always excitement at that announcement, which was made to me at all times of the day and night as I sat before the catalogues measuring rats' feet and frogs' tummies, pickling lice and worms, and doing the other multitudinous odd jobs that a scientific collecting trip entails.

A grinning black face appeared above the verandah level with my feet.

'Well, what is it?' I inquired.

'Beef,' replied the face. 'Master go take 'em two shilling,' and he fumbled in his cloth.

With a scream he withdrew his hand and started sucking his finger, cursing loudly and roundly in By'angi. Willing helpers came forward, searched him, and produced two minute black clots of glossy fur each about two inches long. These were placed on the verandah, where they instantly rose on their hind legs like pugilists and, screaming in



almost inaudibly high-pitched voices, proceeded to wrestle and box with each other. I say wrestle and box, but there certainly were n't any rules.

Of all the mean, unpleasant, evil-smelling, vicious things that live, the West African shrew (*Crocidura*) is the most mean, unsavory, and irascible. These screeching little horrors were bought for a penny each, placed in a tiny cage, and supplied with a haunch of strong-smelling anteater meat. They fought and screamed for the rest of the day and most of the night. Next morning all the meat, larger than both of them put together, had vanished, and only one shrew remained alive. The other lay in a corner of the cage, eviscerated and with most of its head eaten by its companion.

These shrews will attack anything, man and large bush cats included. Their tiny jaws are armed with a phalanx of needle-sharp teeth, and their pungent smell protects them from predatory birds and mammals alike. They are classed as insectivores, but their diet is more omnivorous than that of man himself. I have seen them eat each other, insects, shellfish, corn, putrified flesh, and even a dead snake. They inhabit the long grass of forest clearings, where they are often caught, as in the case of these two, when natives are clearing the ground.

As the day wore on, our friend who had been bitten returned several times with more shrews, as well as a variety of other local vermin, until the whole house began to stink. This smell is unbelievable until it is encountered. In the British Museum I have merely touched a large bottle of alcohol in which some shrews had been sealed for over three years and had to wash my hands twice to prevent being sick. Nothing drowns the smell; it gets everywhere. Yet by a simple process the natives transmute it into the most delicious, delicate, and lasting scent I have ever encountered, smelling somewhere between sandalwood and tangerines. The shrews are stewed whole with certain leaves and palm oil to bind the brew. The oil rises to the surface and is skimmed off, carrying with it the wonderful aroma that is so unlike the beastly little animal.

### IV

During our expedition we collected some 7000 odd animals comprising about 450 species. This is only an approximation, as several of the groups have not yet been completely identified and named. There proved to be 70 species of mammals; 64 different reptiles, including snakes; 46 different frogs, and about 250 different spiders, centipedes, parasitic worms, ticks, crabs, lobsters, shells, scorpions, and others. Only a handful of the whole lot are sufficiently well known to have popular names, and quite a number, being entirely new even to science, are only now receiving 'Latin' names. The result is that I have no choice but to label the creatures to whom I introduce you by their fabulous scientific names.

This may, however, serve a double purpose. First, it may answer a question that is constantly asked: why do scientists persist in allotting such stupendous titles to such obscure animals? Secondly, it may act as a kind of insurance for the mere facts that I have perforce to include in my tales.

Facts about lions and rhinoceroses are open to verification or speculation, as the case may be, whereas facts about a frog with hairs are open to neither, unless some peg is provided upon which that frog may be securely hung. The scientific name does this, as it gives a guide to the purely zoological and gruesomely intricate literature upon the subject.

The absolute necessity of giving

animals their true and complete names is evident when the wild life of the world and not merely of these insignificant little islands is being dealt with. There are over six thousand different beetles in the British Isles alone; when investigating a place like the Cameroons, the infinite varieties are legion. In England we have but four frogs; in Mamfe there are at least fifty different kinds. Try to think of fifty different names for frogs without becoming idiotic or grammatically absurd!

To turn to *Rana occipitalis*, this frog's name means literally 'the back-of-the-heady one who makes noises.' The word *rana* was used by the Romans for 'frog,' but it comes from the more ancient Sanskrit or Aryan stem *ru* or *rau*, meaning 'one who makes a sound'; hence the inference. The *occipitalis* signifies the great width of the head, which really is prodigious, so the Latin name is not altogether absurd.

These frogs are very numerous in all cleared spaces of the jungle. They are aquatic, spending most of their time floating at the surface of the water with their protuberant eyes sticking out like periscopes. They grow to a length of about six inches and are very voracious, swallowing insects, spiders, crabs, smaller frogs, and most else that comes their way. Without them and their allies which inhabit the same waters, man would be in an even more sorry plight than he is at present in these lugubrious climes. They demolish countless myriads of mosquito larvæ per year, and without them these carriers of the mortal yellow fever and malaria would become so numerous that man would be driven from the country altogether.

*Rana occipitalis* is impeccably spotted below with black on his otherwise pure white belly. He was a sore subject to our native staff of skinners and trappers. Several large specimens were brought to us alive and placed in a large bowl with a lid weighted with stones. Needless to say, they all jumped in unison and made their escape while we were occupied elsewhere. They scattered far and wide before we discovered our loss. Some 'made for bush,' as the West African term is for going home to the vegetation; others behaved in a peculiar and decidedly questionable manner. They apparently found their way into the bedroom (or rather the space where we slept) and concealed themselves in a certain unmentionable article of bedroom furniture. I forthwith retired to rest with an attack of malaria.

As I lay under my mosquito net shivering and aching with the fever, strange metallic sounds were wafted up to me. I could not imagine where they were coming from or what they were. Time passed and the light began to fail. All of a sudden I forgot my fever as a raucous singsong clamor broke out beneath my ear. 'Car-r-r-ach, car-r-r-ach,' it went, reverberating through the room, and the stanchions of the mosquito net quivered in unison. I leapt out of bed convinced that my temperature had risen to the point of delirium. The noise ceased abruptly. I yelled for the household staff (No, I won't call them 'boys'!) and hurrying feet came out of the rapidly descending dusk.

'Am I talking gibberish,' I inquired, 'or is there a peculiar whirring noise going on in here?'

Gong-Gong listened intently, but his face belied his concern for my mental condition. He did n't hear anything, he assured me; I began to retire below the mosquito net. No sooner had I done so than it burst out afresh. Gong-Gong dived under the bed.

'Master, the beef!' he shouted, pushing out an article of enameled furniture, from which sprang half a dozen eager amphibians.

The whole household turned out and a great pursuit began. All the frogs were eventually collared and drowned in the all-absorbing alcohol. I burst into a profuse sweat more from laughter than surprise, and another attack of malaria was satisfactorily overcome.



V

Such vermin as I have mentioned are common features of the inhabited parts of the land, but there are others more numerous and more essentially 'verminous.' The common toad (*Bufo regularis*) is the only source of food of the deadly night adder. This frog — for all toads are frogs, just as all gnats are mosquitoes and all dromedaries are camels, despite what your nurse or your schoolmaster may have told you when young — is an interesting animal notwithstanding its commonness and reputation. Toads are not evil, are quite harmless to handle, and, in fact, make intelligent though rather unconventional pets. *Bufo regularis* is not unlike our common toad, but its behavior is very different in many respects.

When we arrived in Africa in September, the mystic, though often rainy, nights were filled with strange noises. Predominant among these was a terrific, colossal, stupendous — and any other word the American film writer can think of — babel, created by our friend *Bufo regularis*. I eventually tracked down the nearest colony to a wellhead by the house which was crowded with individuals gathered together to mate and to 'sing' — which functions appear to be intimately linked in amphibian ethics.

The males were small and yellow, the females large and dark brown. Only the former 'sing,' but the power of their lungs, or rather of the special pouches in their throats, compensates for their mates' inabilities. Colonies of toads are dotted about the countryside within hearing of each other. For a time all is silence, and only the whirring of the myriad nocturnal insects can be heard, a noise that is itself akin to silence by reason of its incessant stridence. All of a sudden one toad, acting as a sort of precentor, will begin, 'Quir-rrr-rrr-whirr, quir-rrr-rrr-whirr,' into which the others of his colony join in perfect rhythm. Other colonies take it up until the whole countryside is deafened with the racket, which is as precise as a machine. All at once it ceases, as if every toad had been struck dead at the same instant by an electric current. Occasionally one choir far off will fail to stop and will carry on for a few seconds like an echo. The effect is very remarkable, and remains as unexpected as it is irritating throughout the night.

This behavior, concerned as it is with mating, was in full swing when we arrived in Africa. As the weeks passed, however, the rains ceased and the toads got done with their spawning. They then left their damp abodes and scattered over the drier country. They also quit their strident community singing and adopted a sort of 'cluck-quack' which they uttered incessantly but at irregular intervals throughout the night, and individually.

Still later in the year, when we were in the big river living on a sort of glorified punt, these busy little beasts were congregating on the sand banks, apparently waiting for the rains to come down and swell the rivers, making them thirty feet deeper and enabling the toads to gauge the safe limits of their spawning grounds. They seem to know that if the eggs are laid too close to the swiftly running stream they will be washed away and perish.

On one particular night we tied up alongside a narrow sand bar at the bottom of a deep gully clothed in virgin forest. When the paddlers had put away their gear and gone off to a near-by village, night descended on us, engulfing us in that world of ephemeral loveliness only known in the deep trop-

ics, where the whole air is filled with lascivious smells and sounds. Gradually a roaring rose above the gentle swirl of the oily waters. Louder it grew, and still louder, like a gigantic turbine, though muffled and apparently coming from all directions at once. We shone the torch on to the sand bar, for it was now quite dark, and myriad pairs of little rubies leapt into being. There, crowded in thousands together, we saw the little toads all squatting with their eager little faces directed upstream. There must have been hundreds of thousands of them stretching as far as the eye could see, all pale fawn color, all with their little throats pumping in and out like tiny bellows as they called incessantly for the rains to fall and wash them up over the banks into the flooded forests beyond. We stepped out among them, and although scores leapt into the dark waters, thousands remained hopping around our feet, blinking their ruby-red eyes in the torchlight.

Here were the same toads we had seen yellow and black in Calabar, deep reddish brown on the grassy slopes of Mamfe station, mottled brown at other places, and now all light fawn in color. Protracted research eventually elucidated the puzzle, and here is the answer. The color of toads' skins is produced by minute granules of color known as chromatophores. These congregate in tubular cells situated in the deeper layers of the skin. When the toads are in the water to breed, their skins are moist and transparent and the colors show through. Not only this: the changes of color produced by alteration of heat and light or by anger or fright, as in ourselves when we blush, may also be seen, and frogs have an ability in this respect far surpassing even the chameleon. Later, when they leave the water, the outer layers of their skin dry up and become opaque, and their colors duller and more static. By the end of the year the skin is hardened and dead, so that practically all color except that of contained dust particles is gone, making them appear dusty and grayish brown like a dirty white handkerchief.

VI

No record of the 'vermin' of Mamfe should exclude man's greatest little tropical friend the gecko, though it is an outrage to place his name even at the foot of the list. This little lizard, universal to hot countries in his manifold forms, appears mysteriously in any house as soon as it is inhabited. Running about the walls or stalking insects across the ceiling in his world that is upside down or tilted to an angle of ninety degrees or more, and uttering his shrill little chatters, this animal has been a friend indeed and in need to many a lonely man far away in the wilds. Night after night the little geckos will appear as the lights are lit, until each one becomes familiar, this with his recently broken tail, that with his all but new tail.

Geckos have been known to get so tame that they would come on to the table every night at dinnertime for titbits. After months', even years' absence, the resident in the tropics may return to his former quarters and on the second or third night there will be the little gecko standing eagerly by his plate, his great lustrous black eyes keenly watching, his precarious tail wagging like a tiny dog's.

We had one such that lived in the drawer where we kept our skinning implements. Every morning he was disturbed when we got out our tools, but he persisted even after he lost his tail through getting entangled with a pair of compasses. He just shed his tail from the roots as if it were a useless umbrella and left it wriggling and squirming like another animal in the



drawer. He soon grew another, but his affliction did n't deter him from his nightly labors as self-appointed watchdog to us. Prowling about the ceiling, he would wait for some insect to settle, attracted by the lamplight. Then, whatever its size, — and there were many as large as himself, — he would stalk it just as a cat a mouse. Nearer he came, and nearer, until, forgetting his feline tactics, he would rush in like a terrier. Sometimes he missed; sometimes the beetle, moth, or praying mantis would fly off just as he was preparing to pounce; but if he caught it a great to-do commenced. The powerful insects fought to get free, but the little gecko worried and shook them until one would have thought the sucker-like pads on his feet must lose their grip on the ceiling to which they clung, in opposition to all the laws of gravity.

Only once did he fall, and that time he did it properly. He had seized a praying mantis a little over three inches long, and a strenuous fight ensued. So great was the noise that we put down our pens to watch. The mantis is a truly terrifying creature, apparently always willing to engage in a battle even with man. If one alights on the table before you it will stand up on four legs, turn its beastly head on its narrow neck, and stare you straight in the face with its evil protuberant eyes, at the same time presenting its two forearms crooked like a pugilist's and bristling with rows of slender toothlike spines, with which it not only seizes its prey but also its mate, from both of which it sucks the lifeblood. In fact the love life of the mantis consists of this gruesome performance alone, for without it the male is unable to impregnate the female. Only in its writhing death agonies can it conclude the act of copulation, a thought that might well be pondered by some of our modern sociologists.

Such was the antagonist our little friend had assaulted. The struggle was protracted and the mantis was strong. Suddenly the combatants fell with a crash, squarely into my cup of tea, sending it showering all over me and my work. The gecko was none the worse, but somewhat dazed and utterly amazed. Had I not fished him out, he would have assuredly drowned. I placed him under the lamp to dry off, which he did at his leisure while I dispatched the mantis, for I dislike these vampires.

When the gecko had recovered himself, I proffered the still writhing torso of the insect, but he would have none of it. He allowed me to handle him without attempting to bite, a thing he had never done before; perhaps he knew I was a willing accomplice. Presently he trotted away to regain his exalted topsy-turvy world.

The body of the mantis remained on the table in two completely separate parts. Next morning at eleven-thirty it was still wriggling. I wonder if it was a male?

VII

We camped near the road because, while it lasted, it served as a useful method of getting about the otherwise almost impenetrable forest, and also because it was useful to know whether it was cloudy or fine and whether the wind was blowing or not, which was only discernible through this narrow cleft in the roof of the forest.

Along it we wandered with shotguns and field glasses, in the heat of the evening — at least so we judged by our watches, for the degree of light was always somewhat crepuscular.

I was thus lazily employed on the third day after our arrival in the forest, when all our gear had been stored in a shipshape manner and mysterious little bush-stick and green-leaf houses had finished sprouting up around the domains occupied by the communal cook-

ing fire. I carried my shotgun gingerly while I navigated myself from root to root and boulder to boulder, my mind filled with reminiscences of cleaning four hundred traps, and forebodings of the imminent collapse of the tent, which appeared to be only a matter of time.

All at once I was arrested by a sound that I could have sworn was an organized revolt on the part of my own stomach against the unnamed muddle that had been forced into it at lunchtime. A little confused, with that unreasoning but inbred bashfulness born of civilized ethics, I paused, prepared for the indignity to repeat itself. Sure enough, it did, but from somewhere among the foliage to the left of the path.

Such a phenomenon, when encountered for the first time, is arresting to say the least; yet it very soon became the second time, then the third, then the fourth, until I began to feel quite used to it. I have dined with a most illustrious Chinese family, also with the inmates of a Balinese seminary, who both showed their appreciation of the ample fare provided for them, with great gusto, in this unmistakable though to the European mind somewhat unconventional and rude manner. But the little chorus that went on around me as I waited silently in the African jungle surpassed the wildest fancies of the Orient.

When I moved, the babble (or gurgle) mysteriously died away. This was repeated several times until I began to wonder whether, after all, it was not a trick of the forest, with its unaccountable echoings and ghostlike sighings, which I had begun to appreciate so well. When I paused again at the bottom of the gully, however, the local intestinal disturbances became almost deafening, and I conceived a strong desire to see the perpetrators of this outstanding performance. Every time I moved to try to peer among the undergrowth, the noise ceased abruptly, only to commence again more loudly than ever. Annoyed and mystified, I crouched in the path among the roots, waiting for my tormentors to show their hands, or any other portions of their anatomies.

As they did not do so, but were getting uncomfortably close on both sides of the path, I conceived a plan. By a method learned at school and employed with marked success around the coffeepot in the less accessible parts of the Orient, I joined the chorus, weakly at first, but with ever-increasing volume — if I may put it that way. The results were beyond my wildest hopes — and, for that matter, fears. The accompaniment of my jungle acquaintances came closer around me, though I had thought that they were already as close as they could be without showing themselves.

This was very awkward, for it now appeared that they were of considerable size, and, if judged by the only sounds they uttered in comparison with the same produced by man, they would have been about twice the size of an elephant. I indulged in a hurried zoölogical stocktaking of all the inhabitants of the West African tropical forests that I knew of. Nothing seemed to fit the case except chimpanzees and bush pigs, yet the former should be away up in the trees and the latter would certainly have given other fair warning of their identity. I consequently gained in inquisitiveness though also in uneasiness.

A few moments later I had dropped positively all inquisitiveness, unbefitting as it may be for a zoölogist to admit it. Suddenly before me sat a most menacing figure, apparently wrapped in a gray shawl, and scrutinizing me with a pair of unpleasantly piercing eyes from beneath a scowling brow. He (or she) and I both ceased our visceral



mutterings promptly and uttered a surprised 'Uh' so precisely in unison that I got an overpowering desire to giggle. This was, however, as quickly wafted away also, when zoölogical reasoning came to an abrupt halt. I had not suspected that drills (*Mandrillus leucophæus*), though baboons of a sort, went about in large, belching parties.

Now I had met baboons before, and although I took a great interest in their behavior and should have liked to return to camp with a fine specimen such as now sat complacently before me, I remembered that discretion was always the better part of valor when in their presence. I therefore stood up to go, trying to be as unhurried as I imagined I should be at a vicarage tea party, though I have never attended one. This simple movement, however, was heralded by unmistakable complaints from all sides in the form of the most unpleasant grunts. The old lady (or gentleman) before me also rose, but on all fours so that his or her posterior came into view. It happened to be bright pink at this time of the year, and I thought of that absurd Homeric description of the dawn as being 'rosy-fingered.'

This display had remarkable effects. The bushes parted on all sides and a surprising array of subhumanity presented itself, ranging from one obvious male of quite alarming proportions to the merest tiddlers with pale, flat faces quite unlike their dog-nosed, black-visaged elders and betters. Their movements were leisurely, as if they were taking their places for a boxing match; they chattered and grunted exactly like any crowd of pleasure-seeking human beings preparing for an entertaining display.

While all this taking-of-seats was going on, I was retreating gingerly backwards up the path, while trying to learn the rules of monkey ethics in the raw. The outsize gentleman, however, seemed to have been appointed as doorman. He trotted into the path behind me and stood squarely upon three boulders, one for each back foot and one for his gnarled hands. This was all very unpleasant, and I found myself waiting with some trepidation to see what was the next item on the agenda. As they continued to sit and grunt to each other, it appeared to be up to me.

I don't expect you have ever been surrounded by a troop of expectant baboons, but if you have you will probably agree that it becomes extremely difficult to think up any suitable parlor tricks. Personally, my mind was a blank, especially as each part of the circle to which my back was turned in succession seemed to think its chance had come to grab a ringside seat, and, since one can't face all ways at once, the ring began to diminish rapidly. I remember thinking, stoically and hopefully, that drills are vegetable feeders and that I was not a vegetable although I doubtless looked like one. When the old gentleman yawned, however, and I had a glimpse of his three-inch fangs, I began to doubt the words of wisdom uttered by the worthy professor of my late and, at that moment, greatly lamented university.

I did remember that almost any animal, even a surprised tiger, will shy away if one stoops to pick up a stone and make pretense of throwing it. This I instantly put to the test, but in my excitement I picked up a stone and accidentally hurled it at the big yawning male with a force of which I did not believe myself capable. We were all greatly surprised when it found its mark in a glancing blow. This, combined with my sudden action, made the spectators jump backwards with some emphasis, so that I was given quite a lot of room to move about in. My target seemed quite angry, as might be

expected, and, as I stooped to gather more missiles, he waltzed about and returned the compliment with some vigor, scraping the ground with his hind feet, gathering up a small boulder in the process, and projecting it straight at me with considerable accuracy.

This heralded a great commotion. Apparently the show had begun. I hurled more stones in all directions, and although the admiring onlookers retreated each time, those on the opposite side advanced, the gentleman who had yawned so indulgently most of all. He was now very angry indeed, projecting stones and big blobs of spittle at me alternately as he waltzed about, presenting first his revolting, doglike visage and then his still more revolting and quite uncanine other end.

These tactics, combined with other stones and the fast-descending dusk, made me not only definitely frightened, but inexplicably angry, too. Once I nearly put a charge of lead into him, but luckily checked myself, realizing that this trump card would be even more useful later on when the difference of opinion became general, as matters appeared to be rapidly drifting in that direction.

During one of the periodic lulls between these diplomatic interchanges, now carried on in a more or less tense silence, one of the smallest and most youthful of my audience uttered a peevish squeal and bowled a small lump of earth at me, just as an underhand lob-bowler in a juvenile cricket match would do. The action was so ludicrous that in my decidedly agitated frame of mind I burst into roars of laughter. Why it seemed so screamingly funny I don't know; perhaps it was n't really so at all. But my action proved a most fortunate one.

The brat's mother made a dive at her now cowering and shivering progeny, gathered it to her bosom, and bolted, followed by several other mothers and their offspring. The remaining 'stag party,' numbering some dozen, began running to and fro, looking surprised and angry. I continued laughing and shouting as if I were at a football match, and soon became quite incoherent from sheer nerves. I advanced on the old male, shouting, 'They've made a goal! Run, run, you old idiot! *Bonjour, mademoiselle, cochon! Nunca café con leche!*' — at the same time executing a spine-rocking rhumba combined with all the other outlandish dances in my repertoire. He stopped dead in his tracks. His eyes opened wide and his whole face took on a quite ludicrously human expression. He muttered to himself. 'Standing aghast' was the only way to describe his poise, as if he were just as much shocked at my behavior as he was bewildered and frightened at what he saw. A few seconds he stood his ground, amazement written all over his face; then his nerve gave way and he shied like a dog. His final rout was accompanied by a flood of the choicest swearing from my cockney vocabulary.

With his hurried retreat 'to bush,' my way home was open before me; I wasted no time in taking it, swearing and bellowing with full conviction. Once on the crest of the incline, I sent a couple of shots below in an ecstasy of human bravado and with a feeling of bombastic superiority toward the mere beasts of the field over whom the power of speech had cast such a spell.

(*To be continued*)

# A NATION OF ONLOOKERS?

BY JOHN R. TUNIS

I

The inhabitants of the North American continent are a strange people, and the United States of all lands is the country of paradoxes. We talk incessantly of law and order, yet we are the most lawless race on earth. Our magazines and our movies teem with stories of love, but our business men are too rushed to do anything about it. We spend more money on education than any nation on the globe, and the total result seems to be order in our traffic lanes and disorder in our minds. We are the greatest sporting nation of the world, yet every fall forty million Americans — Dr. J. H. Nichols, director of athletics at Oberlin, estimates the number at twelve million weekly — pay an average of forty million dollars to watch twenty-two boys kick each other and a leather ball round a field.

The greatest nation of sportsmen on earth! What a familiar ring that slogan has. But wait a minute. Are we really a nation of sportsmen, of practising athletes? Of late I have begun to wonder. My doubts started last fall when I came across an article in the *Scientific Monthly* by Dr. Charles D. Snyder, professor of experimental physiology at Johns Hopkins University. He had a suspicion that our reputation as the leader of the athletic world might not be wholly supported by facts, a suspicion borne out by an investigation he made of the various scores in the last Olympic Games held in Berlin in the summer of 1936.

His contention was that these scores did not entirely represent the relative merits of the different nations; that their sporting values were badly portrayed by the actual scores obtained — because some countries had a population of over a hundred millions of athletes to draw upon, whereas others had only a few millions from which to pick their team. Taking as a test the track and field events, and omitting such exotic and indigenous sports as cockroach racing, husband calling, and shin kicking, he discovered that on a basis of population Germany and the United States, who stood one and two in Berlin last summer, would not lead the family of athletic nations.

On the contrary, they were well down in the list, Germany at ninth and the United States in fourteenth place. The countries that were up front were small nations — Hungary, Sweden, Finland, Austria, Holland, and Switzerland, in the order named. As Professor Snyder showed, mere bigness does not guarantee athletic superiority. The windy contentions of American sports writers (myself included) that we were the greatest, the most wonderful sporting nation on earth do not stand up so well under investigation. However, smug in the belief that at least we had more participating athletes per capita than other

# THE GREAT FORESTS

BY IVAN SANDERSON

[IVAN SANDERSON is now in his late twenties. In 1928 he was a member of an expedition to the Dutch Indies, collecting specimens for the British Museum. In 1932 he set forth on a second invasion of the Animal Kingdom, this time as leader of the Percy Sladen Expedition to British Cameroons, West Africa, where for the better part of two years he collected the zoölogical specimens and encountered the beasts he has described in the following pages. — THE EDITORS]

I

THE world of the great forests is a veritable paradise on earth for those who will take the trouble to read its mysteries. Enveloped by towering walls of greenery, like a microbe in a pile carpet, I found never-ending restfulness and comfort in this safe retreat from the glare of the outside world. Perhaps these unconventional reactions to an environment hated and feared by the majority who penetrate there were in some respects connected with my upbringing as a town dweller. Life in great cities is not unlike that in the primeval forests. One passes from one burrow to another along canyons that are only a little lighter, and breadth of vision is everywhere excluded by towering battlements palpitating with the lives hidden behind them. Always there is life around one, but it is hardly visible, so that the imagination must work overtime to formulate its progress, lest one pass forever through the dense crowds utterly alone.

When the sun shines upon the roof of the forest, vistas of indescribable beauty spring into existence below. Golden lights fall upon shady tunnels of riotous greenery. We used to sit by little crystal-clear streams, where pools of sunlight fell upon the moss-covered rocks like spotlights on a stage, and bask in the silent stillness of the day. Here would rise a feathery palm, its roots in the dim recesses of the forest, its fronds extended motionless into the shimmering sunlight with countless slender fingers of delicate jade; there would pass a dancing sapphire insect, while beyond and below and above rose billowing waves of foliage, chartreuse-green and delicate, bottle-green and shimmering or blending hither and thither in colors and textures indefinable.

To dwell amidst this endless foliage is akin to life amongst the gods of old. Past, present, and future have no meaning; the eternity of nature becomes something real. To sit alone in the midday silence of the jungle and try to visualize the machinations of civilized life is an impossibility. All the acts and histories of men become so futile and ephemeral before the grandiose stature of nature that it seems somehow unaccountable and altogether crazy to imagine little humans believing that their comic and futile efforts count for anything at all.

Gradually one learns the sociology of the forest; slowly, day by day, one becomes more attuned to the organization of the life around; piece by piece the





camouflage beneath which everything is concealed is lifted. There is revealed a world of endless variety, of never-ending beauty and interest.

One of the first laws revealed to us was the unsuspected fact that the life of the jungle is like that of the ocean floor. This has never been observed or remarked upon before. Everything drifts slowly hither and thither as if wafted forward by currents and crosscurrents. To stand still is to arouse suspicion — just as a diver, who can actually handle fish and other sea creatures provided he drifts with them across the bed of the sea, becomes an object to be feared and shunned as soon as he remains immobile and anchored.

When hunting, my colleague George Russell and I adopted two entirely different methods. George concealed himself at some vantage point and waited for the waves of forest life to drift by him; I drifted and eddied with the animals themselves. Doing this, I learned many things, and so did he. The speed at which I drifted, I learned, must vary with the weather. Bright, fine days brought life almost to a standstill. In a hurricane I had to run to keep pace with things. Sometimes terrestrial animals would be drifting one way while all arboreal creatures above me would be passing in quite another direction.

Then we perceived that certain animals and types of animals followed quite definite roads through the trees and upon the ground, and, further, that they had times at which they passed to and fro as regularly as machines. Some animals betrayed the presence of others, certain fruits drove others away when they should have attracted them, and so on; the laws and rules were never-ending in their variety.

Drifting thus across the floor of the forest, I once approached a little dell into which flowed a small stream. The ground was boggy and covered with lush vegetation so that the waters spread far and wide, forming a small marsh. As I slid noiselessly along following the tracks of a small squirrel, a murmuring and rumbling came to my ears, dim and faint at first, a mere ghost of a sound. Gradually it gained in volume until it seemed to be all around me. I moved slowly forward, as I had learned I must do if I were to gain a glimpse of the animals that were causing all this 'talk.'

Abruptly I came upon them, a veritable herd of the weirdest animals I have ever seen. Rich orange in color, with monstrous heads, they formed a vivid contrast to the sombre greens of the water weeds. It seemed, in fact, as if they were more than half head, since their short legs were sunk deep in the morass that they were busily creating in the soft earth. On their heads they bore tall crests of spotless white which passed backward into a long white mane falling this way or that over their shoulders. Their ears were long and pointed, terminated by a long white plume, which they constantly flicked and twitched as they ploughed up the ground in long, even furrows. All the while they grunted and grumbled contentedly.

A herd of river hogs (*Potamochoerus porcus*) is an unusual sight; they seem as contented and lazy as ordinary farmyard pigs, and yet their vivid coloration and their grotesque form make one pause and consider whether one's sight is playing a trick. In the wilds they don't look like pigs at all. They are, in fact, unlike any other animal, with their great heads, long, tapering, plumed ears, and tall, narrow bodies.

Having drifted right in among them and been scrutinized by a large, dangerous-looking hog and apparently found quite welcome, I allowed myself to move gently forward. I had read of people in East Africa approaching to within a few feet of perfectly wild lions at the midday siesta, — in fact, my own father was one of the first to show that this was possible provided one moved slowly enough, — but I never suspected that these tactics

were applicable to such wily and arrogant animals as the red river hog of the forests. Nevertheless, I soon found myself right in the centre of the herd, noticed but unfeared by them. Perhaps the fact that I carried nothing smelling strange, like a gun or camera or other oily metal instrument, reassured them. Gently they moved around me, as we were all drifting in the same direction; sometimes four would be in view at once, sometimes all would vanish amid the foliage so that I knew of their presence only by their ceaseless, moaning grunts.

For ages, it seemed, this unique contact went on undisturbed, during which time I was favored with the priceless opportunity of watching these rare and obscure animals carrying on their everyday existence in perfect harmony with their surroundings. They are indeed peculiar hunters. I had always supposed them to be herbivorous, and yet I saw one large sow unearth a cluster of huge snails and set to work cracking the shells and munching up the juicy contents. In this she was assisted by three small hogs who tussled and bit each other in an effort to get at the morsels. The tactics consisted of flying tackles in which they threw their whole weight into their shoulders and banged their opponents, one of whom was sent sprawling into the muddy bog. The sight of a wild animal floundering on its back was really most remarkable and gave me the impression of watching a group of school children at play.

One old hog, who kept looking at me as if realizing that I might be potentially dangerous, made a most comical misjudgment. He was rooting along the edge of the marsh, stopping now and then with his long snout several inches in the mud to crunch up some hidden root, when he inadvertently pushed under a particularly tough root extending from a large tree on the solid ground near by. It appeared that he had small tushes (as I saw later), and these must have got locked under the root, for he suddenly set up the most terrific racket, dancing about with his back legs and giving little hops like a ballet dancer, heaving, pulling, and squealing as if caught by the nose. At first I thought he was fighting something on the ground, since his nose was out of view behind a small plant, and I stupidly moved to see what it was all about.

This worried the others, who began to move off hurriedly, but I got a good view of the hog as he writhed in fury, tugging at the root. Then my attention was drawn to one of the loveliest sights I have ever seen. As the herd moved past me with ever-increasing speed, out trotted some individuals I had not seen before. Among them was a positive swarm of tiny piglets, each immaculately striped with gold on its little, otherwise naked body. They trotted along in line, uttering high-pitched grunts and herded from behind by an agitated mother, who kept prodding their delicate little hind legs as if to say, 'Go on! Hurry up or the bogeyman will get you.' The whole scene was so perfect that I stood spellbound at the sight of it.

Just then a young animal, whether male or female I know not, trotted by and I instantly determined to try to capture it. It came so close that I had a vision of this amazingly colorful creature in the zoo, the centre of surprised and wondering crowds of holiday makers, and I made a dive for it. Although I moved with lightning speed, and actually touched its hard, bristly haunches, it leaped aside and plunged off into the undergrowth, yelling like a human. The old hog must have made a super-porcine effort at that moment and got free, for I heard him crash off at high speed into the distance.

Dusk was falling as I waded back across the swamp, now churned up like a ploughed field by the sharp snouts of the hogs. The way in which they can overturn a plot of ground is really unbelievable.



II

Besides the squirrels that inhabit the trees of the forest, there are others that live exclusively on the ground. These are quite different in appearance, and, being more difficult to obtain, are of more importance for study. We managed to collect a few in traps set for rats, but when a live example was brought to the camp by a small African boy I felt that our chance had come. These animals (*Funisciurus leucostygma*) make a peculiar ticking-clocking sound as if the tongue were being flicked down between the lower teeth, and from this fact I inferred that they could call each other together to partake of the food they unearthed or for other reasons.

We therefore took this little squirrel and placed him in a cage that had previously been sterilized of all human smell by being buried in the leaf mould of the forest floor. This was transported to a remote part of the forest without being touched, and suspended on a crooked stick. We concealed ourselves near the decoy and awaited developments.

The sun was shining brightly when we 'went to earth,' but after half an hour or so, during which the little animal kept up an excited 'clocking,' it clouded over. A stiflingly hot wind like a blast from a furnace flue blew up, and the sky got darker and darker. The few tiny patches of sky that could be seen through the leafy roof turned to a foreboding purplish gray like the night sky above a great city, and the trees began to sigh and murmur. It got darker and darker every minute, and all the sounds of the jungle ceased except the plaintive call of the little squirrel.

All at once a noise like an express train started far away to the east. The effect was most peculiar and eerie, because down below in the gloom of the jungle only its echo could be heard, the main volume of the sound passing by overhead, above the foliage The trees began to sway with ever-increasing violence until even the giants were bending towards the east, a tearing, roaring hurricane soaring through their summits. We remained in a terrible, ominous calm, the daylight faded to a portentous pinkish half-light, while above us the whole world seemed filled with a host of screaming, demented devils, so that the jungle, usually so solid and stable, was bent at a frightening angle. The roaring came rushing onwards, mounting in volume every second until we had to shout with all our might to hear each other.

Then suddenly it came. The hot wind came to a halt, the trees quivered at the shock of it, and without warning the whole floor of the forest rose up with one accord and was blasted upwards into the upper branches of the trees. Leaves, branches, clods of mould, and even logs swirled past us, ripping away our camouflage and hurrying across the turbulent forest floor like live things, then suddenly and unaccountably leaving the solid earth and soaring into the air with ever-increasing speed, only to be whisked out of sight above. Blinding flares of lightning shot and flickered through the crazy bedlam, and huge branches and a cascade of heavy things crashed all about us, only to be caught up in the general headlong flight as soon as they reached the ground and again be projected into the upper air.

Even buried as we were at the bottom of the dense jungle, we had to cling to roots and gasp for breath in the swirling tornado of dust and leaves. Choking and buffeted, we saw an awe-inspiring change. The flying rubbish of this primeval world suddenly paused, quivering in the electric air, and then, as if at a given word, reversed screaming in the direction from which it had so recently bolted. Things tore past us again, colliding with tree trunks and exploding with reports like pistol shots. A new wind, icy-cold and cruel, dived into the forest, the giant trees bowed groaningly away from the terror, and amid vivid electrical dis-

charges solid water came spewing down to earth with the force of miniature bombs.

In two seconds we were drenched to the skin, and water poured off us as if we were in a shower bath. I struggled to my feet and staggered forward through the blinding cascade towards the cage that housed our precious squirrel. The water was falling so compactly that I could see very little, but I soon discovered that the cage had gone. We then began a search and eventually stumbled across the string that had held it. Ben and I advanced again towards an immense tree base formed of towering flanges.

As we entered one of the cubicles formed by these flanges, a curious sight met our eyes. Right in the angle at the junction of the flanges with the base of the tree and the ground, a silvery-white animal with a long bushy tail and tall slim black legs was worrying the cage containing a now terrified and screaming squirrel, just as a terrier would worry a rat. At our approach, this amazing animal jumped round, dropped the cage, and barked at us.

We took up our stand at the mouth of this natural pen and began a cautious advance. The animal growled menacingly, just like a dog, and then made a rush at Ben's naked legs. Being thoroughly surprised, he countered the attack, but the agile animal leaped back again. We continued to advance upon our quarry, but instead of attempting flight, it crouched menacingly behind the cage and bared its fangs at us. I told Ben to take off his singlet and try to put this over its head so that he could effect a capture. I meanwhile stood back ready to dive at it should Ben miss.

This he did completely, because at that moment a large rotten log that must have been lodged up among the branches far above for many months was released by the tornado and crashed down between us. It landed with a sickening thud not two feet away from us and burst into a thousand small pieces. The nimble mongoose leapt aside, circumnavigated the startled Ben, and bounded past my equally unnerved self. I raised my gun to fire and a stream of water poured out of the barrels, but I let go both charges in quick succession at the fleeing animal. It fell dead after a few paces.

This was the first white mongoose (*Galeriscus nigripes*) we obtained, but later on we managed to film one of these obscure animals in the act of stalking its evening meal.

III

One evening we were busily occupied completing catalogues and other written work. The camp was very still and Ben and Bassi had long since departed into the blackness of the night with the shotguns and the torch.

A shot rang out some distance away and was followed almost immediately by a quick left and right. After a short pause there came further firing. Suddenly I developed a keen desire to see the spoils and decided to slip out of camp and join the hunt.

Taking the spare torch, I crept away unobserved and was soon weaving my way among the trees and creepers in the direction from which the occasional shots still rang out.

When I was some distance from the position of the last shot fired, I entered an area where a considerable number of animals were noisily moving through the trees above me, apparently shifting from the centre of danger. I shone the beams of the torch upwards in the hope of catching a glimpse of them.

When I did so my whole inside gave a clutch with excitement and delight as I gazed upward, for suspended from a branch almost directly above me was an animal of the most curious though unaccountably lovable appearance. This statement may sound mad, but to those whose childhood was spent among Teddy bears it may perhaps be intelligible. It was upside down, with an eager little round face peering down over its back at me. So low down was it, indeed, that I could only watch fascinated while it licked its pink nose with a tiny pink tongue to match. The rest of the body was compact, brown and woolly. It blinked at me in the glaring light and then began laboriously clambering forward in the direction of the tree trunk, still suspended upside down like a sloth. A presumably natural urge prompted me to attempt a climb so that I could come to closer quarters with this adorable little toy of the forest and perhaps even capture it.



The climb was not an easy one, though it was a miracle that there were any branches at all to allow of an ascent. This was difficult, as I had to keep the torch beam on the animal all the time so that it would not disappear among the tangled foliage, and the whole procedure evolved into a race between myself and the potto (for that was what it was) to reach the angle between the branch and the trunk. Most unfortunately I got there first.

As I arrived astride the branch the little animal realized the folly of its manœuvre and appeared on the upper side, where it stood on all fours just like any ordinary animal. Here it looked more awkward and not nearly so lovable. Its large feet and hands were turned outward like those of a very old, rheumatic human, and its head hung down in exactly the attitude adopted by a ferocious bear. Being only a few feet distant, I could see plainly the parting in the hairs on its back and the row of spines projecting from its neck. These I knew to be the bony processes of its neck vertebræ, which protrude right through the flesh and appear as a row of naked bony spines. What I did not know, however, until that moment was that the animal could control the fur around them, opening or shutting it so that the spines could be revealed or hidden at will. Nor had I ever suspected the animal capable of what I subsequently witnessed.

The potto stood up on its hind legs with its forepaws clenched as if in prayer, and then all at once doubled up so that its head disappeared between its crouching hind legs. If an attacker had been advancing to seize its throat at that instant he would have been rent and pinned to the branch by the formidable row of spines.

After this remarkable performance had been repeated two or three times, during which I had been cautiously advancing, the wise little animal turned about, swung on to the underside of the branch, and retreated towards outer space with a rapidity of which I had not suspected him capable. Although only about the size of a small cat, he was able to cling to a branch thicker than a man's torso from underneath and hasten along without any apparent difficulty.

Holding the torch in my mouth, I went after him.

Before I got near my goal, however, I found that I was suspended precariously among a number of branches that seemed by their feel to be far too slender. The time for succor seemed to be at hand, and I let out a piercing and as nearly falsetto yell as I could muster without projecting myself into the outer darkness.

In reply a prodigious cackling, chirruping, and crashing arose all about me. Hooking my arms over some branches, I fumbled for the torch and presently illuminated my surroundings. My predicament was worse than I had suspected, for I soon saw shapes moving around me and discovered that I was in the midst of a very sleepy troop of monkeys. Nearly every day we had seen these animals passing by like ghosts, scampering along their elevated roads, forever out of reach and completely immune from the attacks of all landlubbers. Yet here they were quite dumb and hopeless, blinking in the torchlight and apparently less susceptible to being awakened than a livery clubman.

These animals were quite helpless in the dark. They fell about, whimpered and whined; mothers clutched babies and the larger males crashed around as if they knew the troop should move but were completely devoid of any sense of direction. Many of them bounced about on the branches, suddenly lowering their heads to their forepaws, chattering at me and pulling their scalp and ears backward so that their whole face took on a most frightening though ridiculous countenance. They were putty-nosed guenons (*Cercopithecus nictitans*), and, although I was deeply interested in their habits, our association was not of long duration because things began to give way beneath me. I had to put the torch back into my mouth and look to myself.

One whole branch gave way with both my hands upon it, but by some freak I arrived upside down suspended by my legs with a strong creeper wrapped round my chest. This creeper was my salvation, because I was so long getting unraveled from it that my eyes became accustomed to the dim light (the torch had fallen to the ground) and I eventually swarmed along it until I reached other woody ropes that descended directly to the ground.

I arrived below covered with irritating scratches, with my clothes torn, and quite devoid of any sense of balance, so that I staggered about in the hope of finding the torch. By some miracle again, and with the help of matches, I did so and set out for the camp, which I completely missed. Eventually I struck the narrow forest path and followed it back to our front door.

IV

*'Agoi a-goi agoi-oma*
*Eanagbo,*
*A-goi a-goi atinko*
*Eanagbo*
*Agoi, agoi — MBU!'*

The interior of the jungle echoed as if it were a cave and the trees carven in stone. Anongo's yelling voice rang out far ahead, '*A-go'i*' again and again, and a long thin trail of falsetto and bass '*Eanagbos*' answered from above our heads and below our feet. We all roared '*Agoi, agoi MbU!*' together. Then the world became quiet for a few moments, and only the incessant drip of great blobs of water spattering on broad leaves and an occasional cough from a sweating carrier broke the deathly silence.

Slowly but surely all our possessions, the whole of our little cosmos, crept skyward as tiny insects must do when they fight their way up to the air and the light of day from the depths of the soil. The path was a giant's stairway of huge boulders piled one upon another, moss-covered, cold and quiet in the perpetual gloom — the turbulent floor of an ageless, changeless canopy of steaming greenery. A few paces forward and a man's naked heels appeared on a level with one's eyes. Then came a long pause while some heavy load was hoisted over an obstacle farther up the line, and at last one moved forward again. Would the top never come, like the mountain to Mohammed? Should we, like the insects, never reach the summit and the fresh air?

Then all at once we came to it. The rocky stairway gave place to sticky red clay; the trees rolled back, festooned with waxy, crimson blooms, and we slid blinking out into the blazing sun.

There before us lay a tremendous valley stretching as far as the eye could see. To the right and left rose tier upon tier of softly moulded mountains basking placidly in the still, clear air, bathed in sunlight and clad in tall waving grass, with the wind eddying silently across their face in endless parallel billows. Far up near the powdered sky, little ravines upholstered in dark green forest clung to the face of the grassy mountains or filled in the interstices between the monstrous natural pyramids. The forest ended like a wall to left and right of us, and from our feet the ground dropped right away down to an immense amphitheatre. The air was crystal clear, and the tiniest sounds — a tinkling, bell-like drum, the bark of a dog, the call of some strange bird — came clear and undiluted from the utmost limits of vision.



Stupefied by the startling beauty into which we had stepped, we began to descend towards the village of Tinta, which we saw lying far below us.

When we were still some distance from the cluster of circular houses, we met a deputation headed by Chief Ekumaw, surrounded by the other notables of this wonderful little tribe of unknown mountain people. With them we entered the compound which was to be our future home, and after a great deal of palaver, exchange of greetings, and our respective renderings of jazz music, they departed, leaving us to set up house.

When all was straight we sat down to a hard-earned dinner. Just as the 'palm-oil chop' was being reverently placed before us, we heard a loud report somewhere far up among the mountains in the direction from which we had come that afternoon from the world beyond. We remarked upon its loudness and its lonesomeness, but soon forgot all about it amid the fragrant aroma of well-peppered palm oil. We sat in silence until neither the food nor our tummies could hold out any longer, and then we fell to smoking in silence.

Then out of the night and the cries of animals came a burble that grew louder and louder. Through a hole in the mud wall of the house I could see tiny lanterns approaching. The chimpanzees — Mary and 'The Oaf' — began whimpering and complaining from the darkness of their cage on the mud platform behind the house, and people stirred around the cook's domains, but the burble passed by to the village below, where a still greater commotion began. Soon a small army was advancing towards the house from that direction.

I was surprised to see among them the princely Chief Ekumaw, surrounded by many tall wiry men clad only in leather loincloths and bearing immense long Dane guns. Ety'i, the preposterous official court messenger who had been kindly lent to us by the political officer as interpreter for this particular trip, was also with the company. There were others too, in strange masks.

'Do they bring medicine?' I asked — which means music, a dance, or magic, as all these three, together with medicine proper, are part of one and the same thing in the mind of the African.

'No, masters,' replied Ety'i with a positively pyrotechnic display of gestures. Then everybody began to talk at once, until we became equally excited.

'Ben, what the devil is it all about?'

''Tick — ehn, I no savvy how they talk, master.'

'Well, ask Ety'i, then.'

'He say they bring story of a great beef.'

'Well, which man fit tell story, make you find out one time.'

'Master, this old man he speak English better than Ety'i.'

'Let this man talk, then,' I commanded, and he talked thus.

'This man,' the old fellow began, pointing to a tall muscular African with a savage, insolent face, 'do walker-walker for bush high for up,' pointing to the hills behind the house. 'He hear much animal talk. He be great hunter for these parts [loud grunts of assent from all quarters], so he walker softly-softly-softly for side of small banana farm and, *whoughl* — there for him very eye he see huge beef.'

At this juncture the old gentleman, whom we subsequently learned was a great-great-grandfather, became so enthusiastic that he leaped off the floor in an endeavor to reach the top of the animal's stature in his mind's eye. As he continued he leaped about, groaned, burbled, grimaced, and acted every detail and endless extemporizations on the whole story.

'Which kind of beef this be?' I asked by way of encouragement, but there was no need. After staring at me wild-eyed for a second, the old chap was off again.

'He no be beef, he be so-so man; but he no be man, he be big too much,' and he flung out his arms. 'He black all, he 'trong like plenty-plenty man.' Then he fell to a literal demonstration of the appearance and behavior of this fantastic beast.

'Yes, but what the hunter make?' I urged.

'Ah-haaaa!' everybody agreed.

'Arrrr!' shouted the centenarian, rushing to the far corner of the compound. 'The beef he holler, he holler too much — *bluooer-bluooer* — he COME so!' and he rushed bellowing towards us, sweeping everything within his reach into his arms. 'The hunter he shoot, *bang!* — then he run, he run, he run come for tell chief!' And our raconteur fell, exhausted.

We held a hurried conference. Could it be a gorilla? We looked at each other and then commenced questioning the local inhabitants. Yes, they knew the 'man-beef'; there were many of them about. This animal was indeed one. I sent for a picture of a gorilla and showed it to the chief. The place was filled with 'ah-hurrs' of assent.

Was the beef dead, we inquired. The hunter did n't know. He had not waited to find out! If it was not dead, would it still be there? Were there others? Could we go and see? How far away did it happen? And a hundred other questions we asked. Eventually it was decided that it was probably wounded, and, as it was the father, the family would doubtless hang about; therefore it would be best to start before dawn in search of it. After some further talk they all went away.

By the time we had breakfasted and got out the guns, a little knot of hunters had collected outside the house. We were far up the side of the mountain before dawn began to light up the sky.

From then on the world began to take on a very grim appearance, at least to us. I had imagined that we were going up a mountain to look for a gorilla, but apparently the hunter who was leading us, and whose face I had always suspected, had other ideas. He seemed bent on showing us how many mountains there were in Assumbo, and how straight and tall and fine they were. First we marched up the road by which we had descended into this country, and when we got to the very summit, where the tall forest ended, he suddenly dived to the left among the dense undergrowth. We followed, only to be confronted by his heels. Then began a perpendicular ascent, which he and the other Assumbos tackled at a steady four miles an hour — in fact at the same speed that they would a stretch of perfectly level ground. We scrambled up behind them as best we could, clawing hold of anything we could lay our hands, our feet, or even our teeth and chins on to gain a hold.

Soon we were buried deep in a more or less solid mass of intimately woven and interwoven creepers covered with long moss and branches festooned with lichens like old men's beards.

But we went on up forever into the cold mists at the same hectic rate. Perspiration burst out all over me, saturating my clothes from within as the dripping vegetation was doing from without. This was no ordinary sweat — it was icy cold.

Then matters got even worse. The plexus of wiry creepers descended in one great mass to the very ground and even the hunters were brought up sharp. We fell on our stomachs and began squirming forward. Progress was naturally rather slow because all these creepers in this part of the forest were armed with long thorns. At last the hunter in front of me beckoned and pointed out some small plants about six inches tall. These looked like tiny saplings having a woody stem and only about half a dozen large leaves. Some of these leaves he showed me had semicircular pieces bitten neatly out of them.

'Gorilla!' he said, pointing to his mouth and making his jaws work as if eating. Then we were all brought to a halt.

The ground fell away before us. We were at the top at last. The chief hunter informed us that it was at this spot that he first saw the gorilla. He pointed forward with his finger and we wriggled cautiously onward. Before us lay a solid wall of undergrowth into which we cautiously thrust our way.

Suddenly there was a crash almost at my elbow, the foliage parted, and a great expanse of silvery hair flashed by in the same direction that we were moving. All my nerves gave one great lurch and I fumbled hysterically for the camera. Then I glanced round, but Ben was well out of reach, firmly caught up in a mass of creepers with the gun so tied up that I could not possibly get hold of it for action. At that instant there was a shout from the hunter farther to the right, and, stepping forward, I fell headlong.

The ground dropped almost perpendicularly and so did I. Right before me I just caught a glimpse of a colossal black and white object, then it disappeared behind some leaves and emitted the most fearsome gurgling grunts. I sprawled amongst the undergrowth.

When I scrambled out I found myself on the edge of a small banana plantation choked with other low growth. Beside me stood all the hunters, and lying in their midst was an enormous swollen corpse. It was a huge male gorilla, dead as a doornail, and belching up the gases formed by the decomposition of the food in its dead belly.

Apparently the hunter's chance shot of the night before had found its mark, and the animal had died where it stood feeding on the top of the bank. As we advanced, one of us must have released a creeper that held it up, and it had fallen down under its own weight, flattening the undergrowth and emitting those bloodthirsty gurgling sounds as it rolled over and over, the gases pouring out of its mouth.



Men left at once for the village and we settled ourselves down to await their return. During this time we had ample opportunity of examining our prize. A really large male gorilla in the flesh is a thing that very few have the good fortune to encounter, and still fewer the chance to handle in perfect comfort. Such sights come only once in a lifetime, a thing that we fully realized and appreciated as we stood there gazing at this sad old man of the mountains.

I shall never quite live down the emotions that this sight conjured up inside me. I had always been taught to think of the gorilla as the very essence of savagery and terror, and now there lay this hoary old vegetarian, his immense arms folded over his great potbelly, all the fire gone from his wrinkled black face, his soft brown eyes wide open beneath their long straight lashes and filled with an infinite sorrow. Into his whole demeanor I could not help reading the tragedy of his race, driven from the plains up into the mountains countless centuries ago by more active ape-like creatures — perhaps even our own forbears; chivied hither and thither by the ever-encroaching hordes of hairless, shouting little men, his young ones snatched by leopards, his feeding grounds restricted by farms and paths and native huntsmen. All around him was a changing world against which he bellowed his defiance to the end, rushing forward to meet the bits of lead and gravel blasted at him by his puny rival.

At last the Munchis came and the sad old man was lashed to two young trees and borne away by thirty staggering, chanting humans; away from the silence of the mists, away from his last tangled stronghold; and yet not quite the last of the giants and not quite unmourned.